STAFF REPORT

TO: Planning & Economic Development Committee **DATE**: 8/18/15

FROM: Alan Glines, Interim Planning Director

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SUBJECT: Utility Substations

Summary
The current UDO does not regulate *Utility Substations*. Staff is proposing options for regulation that would allow the construction of utility substations while mitigating the impact on the surrounding areas.

Background
The Asheville UDO defines *Utility Substation* as:

> ***Utility substation*** means a structure or facility for transforming or transmitting a service provided by a utility company to include private utility systems such as telephone, electric, water, sewer, gas, power, etc., but not including telecommunication towers, concealed telecommunication support structures, or other telecommunication devices.

The three electric substations proposed by Duke Energy would fall within this definition, although other utility substations would also be subject. One of the three Duke Energy sites (former Montford Commons property) is zoned Urban Village, the second site near the hospital (former Matthews Ford property) is zoned Regional Business and the third site (former Hayes and Lunsford property) is zoned Central Business District.

It is common for high intensity uses to be regulated as either **Uses by right, subject to special requirements** or as **Conditional uses**, both have special standards found in Article XVI of the UDO. In this case, there are no special standards noted for *Utility Substations*. It is unclear whether this was an oversight or if at the time of adoption (1997) that it was felt that utilities could not be regulated. Whatever the reason, it is clear that at the present time it is within a city's authority to adopt standards to regulate the placement, design, screening, etc. of utility substations.

A survey of 11 other NC cities/counties shows a variety of regulations that have been adopted with the most common ones being:

- Fencing
- A setback from the street and adjacent properties
- A landscape buffer (especially if adjacent to residential)

Other requirements include:

- Limitations to certain zoning districts, or

- Allowed by right in some higher intensity districts while requiring a Special/Conditional use permit in other lower intensity districts, such as residential.
- Degrees of opacity for buffers depending on distance from streets or properties.

There has been some NC case law that has also likely influenced the degree to which standards are proposed and adopted including:

Utilities Commission v. Town of Kill Devil Hills, 194 N.C. App. 561, 670 S.E. 2d 341 (2009). In this case, the town attempted to require the re-location of a new proposed above ground utility line to a different corridor to preserve scenic ocean views. The utility appealed to the Utilities Commission and prevailed. The Town then appealed to the NC Court of Appeals and lost.

In considering the regulation of utility substations the Kill Devil Hills case and others like inform us that while a municipality may adopt standards that regulate the manner and placement of a substation, these standards cannot, however, be so onerous as to effectively preclude a utility provider's ability to provide service, or to provide service at a reasonable cost. Understanding some of the practical limitations of the substations helps to avoid conflict with possible standards. A few of these considerations include:

- A minimum footprint size to support the size of the station needed to provide service – the CBD (Hilliard Ave.) site is essentially the smallest site they can consider to support a small(er) substation
- The need to keep the site secure – typical security includes three fences spaced 5-feet apart
- The need for air movement/heat exchange – this may require a screening option that provides openings for air movement
- Transmission lines must maintain a minimum 25-foot clearance above all structures as they enter the substation – taller fences/screening directly adjacent will force the lines and related support structures higher
- Vehicular access to the transmission poles – vehicular access is typically unenclosed and separated from the station by the fences, it is unclear if the access can be included within the fence

When it comes to developing and adopting standards that regulate and control utility substations in Asheville the following is being proposed for consideration:

- Keep the definition as it currently reads
- Allow all utility substations as a Use-by-right, Subject-to-special-requirements, and
- Develop special requirements for commercial districts that are different from those that are located in residential districts

Possible Standards for Substations in Commercial Districts

1) The utility facility, storage of vehicles or other site features and structures must be setback a minimum of 20-feet from the property line of any abutting residential use or residential zoning, and a minimum of 10-feet from all other property lines.
2) A landscape buffers as required in Sec. 7-11-3(d)(1) shall be required (when abutting residential)
3) The utility facility, storage of vehicles and other site features shall be screened, fenced or walled to restrict access.
4) The utility facility, storage of vehicles or other site features and structures must be screened from view by the use of a wall, building façade, artwork or preserved or planted vegetation to

achieve a screen that is a minimum of 75 percent opaque and 10-feet tall, as measured from the finished grade of the facility.

a) If planted material is used, the screen must achieve this standard within three years of planting.
b) If a wall is used, a minimum of a 10-foot wide planting strip must be placed between the wall and any street frontage and be planted with ornamental shrubs or small trees planted 8-feet on center.

Possible Standards for Substations in Residential + Urban Districts

1) The utility facility, storage of vehicles or other site features and structures shall be setback a minimum of 100-feet from the property line of any adjacent residential use or residential zoning, and a minimum of 10' from all other property lines.
2) A 10-foot tall wall that provides an 80:20 solid/void screen shall be installed to surround the facility and any storage areas to screen and restrict access.
3) In addition to a fence or wall, a minimum of a 50-foot wide vegetated buffer, planted at the same rate as a Type B landscape buffer per Sec. 7-11-3(d)(1)a, shall be required. The buffer may be composed of existing or planted material, or some combination of the two, and must achieve a screen that is 50 percent opaque year round.

Financial Impact/Resources:
Staff resources are required. Given the scope and complexity of the amendment Planning & Legal staff expect to fold this amendment into the regular work plans.

Goal Alignment:
Adopting standards to regulate *Utility Substations* most closely aligns with the goal for Economic Growth and Sustainability by allowing needed utility enhancements for a growing city and, with the goal for High Quality of Life by supporting the infrastructure needed for a modern lifestyle while protecting public safety.

Recommendation:
Staff recommends moving forward with developing a wording amendment for utility substations.